DOCUMENT RESUME

ED 103 712 CE 003 335

TITLE	Door Hardware and Installations; Carpentry: 901894.
INSTITUTION	Dade County Public Schools, Miami, Fla.
PUB DATE	9 Oct 74
NOTE	18p.; An Authorized Course of Instruction for the Quinmester Program. For related documents, see CE 003 212-4, CE 003 333-4, CE 003 336-7, and CE 003 341
EDRS PRICE	MF-$0.76 HC-$1.58 PLUS POSTAGE
DESCRIPTORS	Building Trades; *Carpenters; Construction (Process); Course Content; Course Objectives; *Curriculum Guides; *Doors; Secondary Education; Skill Development; *Trade and Industrial Education
IDENTIFIERS	*Quinmester Program

ABSTRACT

The curriculum guide outlines a course designed to provide instruction in the selection, preparation, and installation of hardware for door assemblies. The course is divided into five blocks of instruction (introduction to doors and hardware, door hardware, exterior doors and jambs, interior doors and jambs, and a quinmester post-test) totaling 135 hours in length. Instruction is accomplished by means of lectures, classroom performance, and textbook references. Emphasis is placed on the manipulative processes. Also presented are the course goals, specific block objectives, and a course outline. Appended are a bibliography and a quinmester sample post-test. (Author/BP)

JAN 17 1975

ED103712

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

AUTHORIZED COURSE OF INSTRUCTION FOR THE QUINMESTER PROGRAM

DADE COUNTY PUBLIC SCHOOLS

Course Outline

CARPENTRY - 9163
(Door Hardware and Installations)

Department 48 - Quin 901894

OE003335

DIVISION OF INSTRUCTION • 1974

ED103712

D A D E C O U N T Y P U B L I C S C H O O L S

1 4 5 0 N O R T H E A S T S E C O N D A V E N U E

M I A M I, F L O R I D A 33132

Course Outline

CARPENTRY - 9163
(Door Hardware and Installations)

Department 48 - Quin 901894

county office of

VOCATIONAL AND ADULT EDUCATION

THE SCHOOL BOARD OF DADE COUNTY

Mr. G. Holmes Braddock, Chairman
Mr. William H. Turner, Vice-Chairman
Mrs. Ethel Beckham
Mr. Alfredo G. Duran
Mrs. Phyllis Miller
Mr. Robert Renick
Dr. Ben Sheppard

Dr. E. L. Whigham, Superintendent of Schools
Dade County Public Schools
Miami, Florida 33132

October 9, 1974

Published by the School Board of Dade County

Course Description

9163	48	901894	Door Hardware and Installations
State Category Number	County Dept. Number	County Course Number	Course Title

Overview: A study of different kinds of door hardware, trims and their application.

Objectives: Students will select, prepare and accurately install door hardware and trims.

Content: A study of doors, door hardware, trim, and the methods of precise installation.

Selection Considerations: Students in this course will have the skills and knowledge of building construction plans, foundations, walls and finishes, in addition to a basic knowledge of mathematics.

PREFACE

This sixth quinmester course outline is designed to provide instruction in the selection, the preparation and the installation of hardware for door assemblies.

In addition to acquiring the skills relevant to this course, the student will develop positive attitudes regarding the value and dignity of work.

This intermediate course is divided into five blocks which are subdivided into a number of units. It is 135 hours in length.

Students in this course will have the skills and knowledge of building construction plans, foundations, walls and finishes, in addition to a basic knowledge of mathematics.

Instruction is accomplished by means of lectures, classroom performance and textbook references. Emphasis is placed on the manipulative processes.

The bibliography lists materials offering additional information in the field of building construction.

This outline was developed through the cooperative efforts of the instructional and supervisory personnel and the Vocational Curriculum Materials Service, and has been approved by the Dade County Vocational Curriculum Committee.

TABLE OF CONTENTS
with Suggested Hourly Breakdown

	Page
PREFACE	1
GOALS	iii
SPECIFIC BLOCK OBJECTIVES	iv
BIBLIOGRAPHY	5
BLOCK -	
I. INTRODUCTION TO DOORS AND HARDWARE (10 Hours)	
Hinges and Locks	1
Exterior and Interior Jambs and Doors	1
II. DOOR HARDWARE (35 Hours)	
Locks	1
Hinges	1
III. EXTERIOR DOORS AND JAMBS (45 Hours)	
Heavy Jambs	2
Solid Doors	2
IV. INTERIOR DOORS AND JAMBS (44 Hours)	
Light Door Jambs	2
Flush Doors	3
V. QUINMESTER POST-TEST (1 Hour)	
APPENDIX - QUINMESTER POST-TEST SAMPLE	9

GOALS

The student must be able to:

1. Demostrate the ability to develop the attitudes, skills, knowledge and values required for entering the carpentry trade.

2. Develop skills and knowledge in specific areas within the carpentry field in order to advance in this area.

3. Become aware of the various career opportunities available by working and cooperating with other tradesmen in this broad occupational field.

4. Develop safe work habits and disciplines in all daily tasks.

5. Demostrate a wiliingness to accept the more difficult tasks facing the carpenter at times.

SPECIFIC BLOCK OBJECTIVES

BLOCK I - INTRODUCTION TO DOORS AND HARDWARE

The student must be able to:

1. Describe the differences between and exterior and interior door jamb.
2. Name two kinds of locks used on interior doors of private homes.
3. Explain the purpose of door fit clearances.

BLOCK II - DOOR HARDWARE

The student must be able to:

1. Name two kinds of hinges.
2. Describe the difference between a mortise and tubular locking assembly.
3. Measure and mark the locations for two hinges to be placed on a door.

BLOCK III - EXTERIOR DOORS AND JAMBS

The student must be able to:

1. Explain the purpose of a door jamb.
2. Install and plumb a door jamb.
3. Point out the difference between brick molding and casing.
4. Fasten brick mold to a door jamb resulting in precise miter joints.

BLOCK IV - INTERIOR DOORS AND JAMBS

The student must be able to:

1. Neatly and precisely install hinges to both jamb and door and install.
2. Correctly install passage lock and mating striker.
3. Explain why new exterior doors usually require more clearance than interior doors.
4. Name four types of locks and three types of hinges that are popular.

BLOCK V - QUINMESTER POST-TEST

Course Outline

CARPENTRY - 9163
(Door Hardware and Installations)

Department 48 - Quin 901894

I. INTRODUCTION TO DOORS AND HARDWARE

A. Hinges and Locks
1. Purpose of hinge
2. Sizes and types
a. Locating and gaining
b. Matching with jamb
3. Purpose of locks
4. Sizes and types
a. Locating and mortising
b. Striker locating

B. Exterior and Interior Jambs and Doors
1. Jambs
a. Metal
b. Wood
(1) Types
(2) Plumbing and installing
(3) Trimming
2. Doors
a. Metal
b. Wood
(1) Fit clearances
(2) Hinge locating and installing
(3) Locks, strikers and installation

II. DOOR HARDWARE

A. Locks
1. Mortise lock
a. Large door edge opening
b. Mortise and gain
2. Tubular lock
a. Round mortised hole
b. Gain
3. Privacy
4. Passage
5. Entry
a. Dead bolts
(1) Flush
(2) Surface
b. Chain and various others

B. Hinges
1. Mortise
a. Full
b. Half

2. Surface
   a. Full
   b. Half
3. Loose pin
   a. Template
   b. Parliament
4. Tight pin
   a. Olive knuckle
   b. Offset

III. EXTERIOR DOORS AND JAMBS

A. Heavy Jambs
   1. Metal manufactured
   2. Wood milled and prefabricated
   3. Wood made on site
      a. Blocking and plumbing
      b. Securing
   4. Threshold
      a. Metal, wood or marble
      b. Caulking
   5. Trims
      a. Brick mold
      b. Casing
      c. Various ohters
         (1) Butt jointing
         (2) Miter joining

B. Solid Doors
   1. Sizing and preparing
   2. Fit clearances
      a. Hinge locating
      b. Gaining
   3. Hinge-jamb matching
      a. Gaining
      b. Securing and pinning
   4. Lock fitting
      a. Mortising and gaining
      b. Drilling and assembling
      c. Striker locating
      d. Gaining and securing

IV. INTERIOR DOORS AND JAMBS

A. Light Door Jambs
   1. Milled and prefabricated
   2. Made on site
      a. Blocking and plumbing
      b. Securing

3. Trims
   a. Brick mold
   b. Casing
   c. Various others
      (1) Butt jointing
      (2) Miter jointing

B. Flush Doors
   1. Sizing and preparing
   2. Fit clearances
      a. Hinge locating
      b. Gaining
   3. Hinge-jamb matching
      a. Gaining
      b. Securing and pinning
      c. Door stops
   4. Lock fitting
      a. Mortising and gaining
      b. Drilling and assembling
      c. Striker locating
      d. Gaining and securing

V. QUINMESTER POST-TEST

BIBLIOGRAPHY
(Door Hardware and Installations)

Basic References:

1. Benson, Ben. Building Contractor's and Home Builder's Handbook of Bidding, Surveying, and Estimating. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1965. Pp. 190.

2. Blueprint Reading and Sketching, Carpentry Trades. Albany: Delmar Plublishers, Inc., 1958. Pp. 260

3. Durbahn, Walter E. Fundamentals of Carpentry, Vol. I. Chicago: American Technical Society, 1963. Pp. 510

4. Durbahn, Walter E. Fundamentals of Carpentry, Vol. II. Chicago: American Technical Society, 1963. Pp. 523

5. Study Guide in Carpentry, Vols. I and II. Chicago: American Technical Society, 1967. Pp. 750

Supplementary References:

6. The American Builder. Bristol: Simmon-Boardman Publishing Co., 1967. Pp. 576

7. Building Trade Math. Examination Problems. Florida: Department of Education, Federal Correctional Institution, 1969. Pp 1194

8. Modern Carpentry. South Holland, Illinois: Goodheart-Wilcox Co., 1968. Pp. 743

9. Tools, Material, Ethics and History of the Trade, Unit I. United Brotherhood of Carpenters and Joiners, Indianapolis, 1959. Pp. 979

A P P E N D I X

Quinmester Post-Test Sample

QUINMESTER POST-TEST

Name_____Date_____Score_____

Multiple Choice

1. A tool used for installing a tubular lock is the
   a. casing.
   b. drill bit.
   c. plane.
   d. round rile.

2. The mortise lock is installed
   a. inside the door.
   b. on door's edge.
   c. on front.
   d. on back.

3. A passage lock would not be found on a door leading to the
   a. closet.
   b. bathroom.
   c. utility room.
   d. living room.

4. When gaining for a door hinge we use a
   a. level.
   b. file.
   c. screwdriver.
   d. chisel.

5. How many hinges are required on flush interior doors?
   a. one.
   b. two.
   c. three.
   d. four.

6. A solid door is usually found on the
   a. inside.
   b. bedroom.
   c. outside.
   d. bathroom.

7. Brick molding would be attached to the outside of a
   a. brick.
   b. door.
   c. corner
   d. step.

8. A material used when blocking a jamb is the
   a. shingle.
   b. oak.
   c. pine.
   d. stud.

9. A jamb fits on the inside of a
   a. door.
   b. mortise.
   c. wall.
   d. hinge.

10. Moldings are machined in a
   a. saw.
   b. vice.
   c. store.
   d. mill.

11. Mortising and "gaining" applies to work on a
   a. jamb.
   b. door.
   c. trim.
   d. threshold.

12. Hinges are fastened with
   a. nails.
   b. nuts.
   c. bolts.
   d. screws.

13. Miter jointing applies to
   a. jambs.
   b. trim.
   c. locks.
   d. gaining.

14. Door stops are made of
   a. molding.
   b. tubular.
   c. brick mold.
   d. miter.

15. Wooden exterior jambs are usually
   a. molding.
   b. milled.
   c. steel.
   d. short.

16. Hallow doors are referred to as
   a. exterior.
   b. swing.
   c. flush.
   d. safe.

17. Three hinges are required on a door that is
   a. light.
   b. heavy.
   c. small.
   d. thin.

18. A sharp chisel is necessary for good
    a. gaining.
    b. drilling.
    c. hinges.
    d. swing.

19. How many inches is the upper hinge located from the top of the door?
    a. 4"
    b. 5"
    c. 6"
    d. 7"

20. How many inches is the lower hinge located from the bottom of the door?
    a. 8"
    b. 9"
    c. 10"
    d. 11"

ANSWER KEY TO QUINMESTER POST-TEST

1. b
2. a
3. b
4. d
5. b
6. c
7. b
8. a
9. c
10. d
11. b
12. d
13. b
14. a
15. b
16. c
17. d
18. a
19. d
20. d